

ABSTRACT

Al-Qur'an is an important guideline for Muslims that must be understood and practiced. Reading the Al-Qur'an with the correct tajwid is one of the keys to understanding its meaning. Research on classification, especially on audio objects compared to text, images, and videos, tends to be less frequent, which is a motivation for research in this field. On the audio data side, choosing the tajwid rule nun sukun or tanwin because NLP can be used for Quran research and studies, as well as developing applications that help learners understand the Quran, so further study is needed on the recognition of tajwid reading rules, one of which is the tajwid rule nun sukun or tanwin. The results of the study show that the DNN classification model produces an accuracy of 71% and an f1 score for iqlab of 0.8, idghom of 0.46, idzhar of 0.77, and ikhfa of 0.72. The results of testing the model with foreign data, each class one data was successful 50%, so the model needs to be improved in terms of its design or audio, especially improvements in the recognition of idghom, idzhar, and ikhfa.

Keywords: Audio Processing; Audio Feature Extraction; MFCC; Classification; Tajweed; Deep Neural Network.